Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-36. (Cancelled)

37. (Currently Amended) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about 100 ~~ten~~ microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about 100 ~~ten~~ microns to about 3,000 microns comprise a polymer and have an interior region and a surface region, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; wherein the polymer has the formula D-B-$[O-(A-O)_n-B]_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant~~,~~

~~wherein the plurality of particles have a diameter of at least about 100 microns~~.

38. (Original) The composition of claim 37, wherein the carrier fluid comprises a saline solution.

39. (Original) The composition of claim 37, wherein the carrier fluid comprises a contrast agent.

40. (Original) The composition of claim 37, wherein the plurality of particles has an arithmetic mean diameter of about 3,000 microns or less.

41. (Original) The composition of claim 37, wherein the plurality of particles has an arithmetic mean diameter of about ten microns or more.

42. (Previously Presented) The composition of claim 37, wherein the carrier fluid comprises a surfactant.

43. (Previously Presented) The composition of claim 37, wherein the interior region is substantially devoid of the polymer.

44. (Previously Presented) The composition of claim 37, wherein the interior region comprises at most about 50 weight percent of the polymer.

45. (Previously Presented) The composition of claim 44, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the polymer.

46. (Previously Presented) The composition of claim 37, wherein the interior region comprises at least about 0.1 weight percent of the polymer.

47. (Previously Presented) The composition of claim 37, wherein the surface region comprises at least about 0.1 weight percent of the polymer.

48. (Previously Presented) The composition of claim 48, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the polymer.

49. (Previously Presented) The composition of claim 37, wherein the surface region comprises at most about 100 weight percent of the polymer.

50. (Previously Presented) The composition of claim 37, wherein the difference between the weight percent of the polymer in the interior region and the weight percent of the polymer at the surface region is at least about 30 weight percent.

51. (Cancelled).

52. (Previously Presented) The composition of claim 37, wherein the plurality of particles have a diameter of at most about 2,500 microns.

53. (Previously Presented) The composition of claim 37, wherein the polymer comprises a halogenated polymer.

54. (Previously Presented) The composition of claim 37, wherein the polymer comprises a fluorinated polymer.

55. (Previously Presented) The composition of claim 37, wherein the polymer comprises a backbone and side groups that are more polar than the backbone.

56. (Previously Presented) The composition of claim 37, wherein the polymer has a molecular weight of from about 500 to about 15,000.

57. (Previously Presented) The composition of claim 37, wherein the polymer is substantially linear.

58. (Cancelled) .

59. (Previously Presented) The composition of claim 37, wherein O comprises a member selected from the group consisting of polyurethanes, polyureas, polyamides, polyalkylene oxides, polycarbonates, polyesters, polylactones, polysilicones, polyethersulfones, polyolefins, polyvinyls, polypeptide polysaccharides, and ether and amine linked segments thereof.

60. (Previously Presented) The composition of claim 59, wherein A comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

61. (Previously Presented) The composition of claim 37, wherein B comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

62. (Previously Presented) The composition of claim 61, wherein B further comprises a functional group selected from the group consisting of esters, carboxylic acid salts, sulfonic acid salts, phosphonic acid salts, thiols, vinyls, and secondary amines.

63. (Previously Presented) The composition of claim 37, wherein D comprises $CF_3(CF_2)_pCH_2CH_2$— , wherein p is from two to 20.

64. (Previously Presented) The composition of claim 37, wherein D comprises $CF_3(CF_2)_m(CH_2CH_2O)_q$—, wherein m is from one to 20 and q is from one to ten.

65. (Previously Presented) The composition of claim 64, wherein the plurality of particles further comprise a therapeutic agent.

66. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a therapeutic agent.

67. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise an additional polymer.

68. (Previously Presented) The composition of claim 67, wherein the additional polymer comprises a member selected from the group consisting of polyvinyl alcohols, polyacrylic acids, polymethacrylic acids, poly vinyl sulfonates, carboxymethyl celluloses, hydroxyethyl celluloses, celluloses, polyacrylamides, polyethylene glycols, polyamides, polyureas, polyurethanes, polyesters, polyethers, polystyrenes, polysaccharides, polylactic acids, polyethylenes, polymethylmethacrylates, polycaprolactones, polyglycolic acids, poly(lactic-co-glycolic) acids, and combinations thereof.

69. (Previously Presented) The composition of claim 67, wherein the plurality of particles further comprise a therapeutic agent.

70. (Previously Presented) The composition of claim 69, wherein the therapeutic agent is bound to the polymer.

71. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a polysaccharide.

72. (Previously Presented) The composition of claim 37, wherein the plurality of particles are substantially spherical.

73. (Previously Presented) The composition of claim 37, wherein the plurality of particles further comprise a coating disposed over the surface region.

74. (Previously Presented) The composition of claim 73, wherein the coating is bioabsorbable.

75. (Previously Presented) The composition of claim 37, wherein the plurality of particles comprise from about 0.25 weight percent to about 50 weight percent of the polymer.

76. (Previously Presented) The composition of claim 37, wherein the plurality of particles comprise from about 15 weight percent to about 35 weight percent of the polymer.

77. (Previously Presented) The composition of claim 37, wherein the interior region has a density of large pores and the surface region has a density of large pores, and the density of large pores of the interior region is greater than the density of large pores at the surface region.

78. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount

than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region comprises at most about 50 weight percent of the polymer.

79. (Previously Presented) The composition of claim 78, wherein the plurality of particles comprise from about 0.1 weight percent to about 90 weight percent of the polymer.

80. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region comprises at least about 0.1 weight percent of the polymer.

81. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the surface region comprises at least about 0.1 weight percent of the polymer.

82. (Currently Amended) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the

surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant~~,~~

~~wherein the polymer comprises a halogenated polymer~~.

83. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the polymer comprises a backbone and side groups that are more polar than the backbone.

84. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the polymer has a molecular weight of from about 500 to about 15,000.

85. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20.

86. (Previously Presented) The composition of claim 85, wherein O comprises a member selected from the group consisting of polyurethanes, polyureas, polyamides, polyalkylene oxides, polycarbonates, polyesters, polylactones, polysilicones, polyethersulfones, polyolefins, polyvinyls, polypeptide polysaccharides, and ether and amine linked segments thereof.

87. (Previously Presented) The composition of claim 86, wherein A comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

88. (Previously Presented) The composition of claim 85, wherein B comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes.

89. (Previously Presented) The composition of claim 88, wherein B further comprises a functional group selected from the group consisting of esters, carboxylic acid salts, sulfonic acid salts, phosphonic acid salts, thiols, vinyls, and secondary amines.

90. (Previously Presented) The composition of claim 85, wherein D comprises CF3(CF$_2$)$_p$CH$_2$CH$_2$— , wherein p is from two to 20.

91. (Previously presented) The composition of claim 85, wherein D comprises $CF_3(CF_2)_m(CH_2CH_20)_q$—, wherein m is from one to 20 and q is from one to ten.

92. (Previously Presented) The composition of claim 91, wherein the plurality of particles further comprise a therapeutic agent.

93. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-$[O-(A-O)_n-B]_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles further comprise a therapeutic agent.

94. (Previously Presented) The composition of claim 93, wherein the therapeutic agent is bound to the polymer.

95. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles further comprise a polysaccharide.

96. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles are substantially spherical.

97. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the plurality of particles comprise a coating over the surface region.

98. (Previously Presented) The composition of claim 97, wherein the coating is bioabsorbable.

99. (Previously Presented) A composition, comprising:

a plurality of particles, at least some of the plurality of particles having a diameter of from about ten microns to about 3,000 microns, wherein at least some of the particles having

a diameter of from about ten microns to about 3,000 microns comprise a polymer and have an interior region extending from a center of the particles having a radius r to a radius of about 2r/3 and a surface region extending from a radius of about 2r/3 to r, a weight percent of the polymer in the interior region being less than a weight percent of the polymer at the surface region; and the interior region comprising an additional polymer in a greater amount than the surface region, the additional polymer being different from the polymer; wherein the polymer has the formula D-B-[O-(A-O)$_n$-B]$_m$-D, in which O is a first oligomeric segment, B is a first coupling segment, A is a second coupling segment, D is a polyfluoro oligomeric group, m is from one to 20, and n is from zero to 20; and

a carrier fluid, the plurality of particles being in the carrier fluid, wherein the carrier fluid comprises a component selected from the group consisting of a saline solution, a contrast agent, and a surfactant,

wherein the interior region has a density of large pores and the surface region has a density of large pores, and the density of large pores of the interior region is greater than the density of large pores at the surface region.

100. (Previously Presented) The composition of claim 67, wherein

wherein the additional polymer comprises a member selected from the group consisting of polyvinyl alcohols, polyacrylic acids, polymethacrylic acids, poly vinyl sulfonates, carboxymethyl celluloses, hydroxyethyl celluloses, celluloses, polyacrylamides, polyethylene glycols, polyamides, polyureas, polyurethanes, polyesters, polyethers, polystyrenes, polysaccharides, polylactic acids, polyethylenes, polymethylmethacrylates, polycaprolactones, polyglycolic acids, poly(lactic-co-glycolic) acids, and combinations thereof;

wherein O comprises a member selected from the group consisting of polyurethanes, polyureas, polyamides, polyalkylene oxides, polycarbonates, polyesters, polylactones,

polysilicones, polyethersulfones, polyolefins, polyvinyls, polypeptide polysaccharides, and ether and amine linked segments thereof;

wherein A comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes;

wherein B comprises a member selected from the group consisting of diamines, diisocyanates, disulfonic acids, dicarboxylic acids, diacid chlorides, and dialdehydes; and

wherein D is selected from the group consisting of $CF_3(CF_2)_pCH_2CH_2$— and $CF_3(CF_2)_m(CH_2CH_2O)_q$—, wherein p is from 2 to 20, m is from 1 to 20 and q is from 1 to 10.